

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
16 June 2005 (16.06.2005)

PCT

(10) International Publication Number  
**WO 2005/053737 A1**

(51) International Patent Classification<sup>7</sup>: A61K 39/106,  
A61P 31/04

(74) Agents: FULLER, Grover, F., Jr. et al.; Pfizer Inc., 201  
Tabor Road, Morris Plains, NJ 07950 (US).

(21) International Application Number:  
PCT/IB2004/003806

(22) International Filing Date:  
22 November 2004 (22.11.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/526,681 3 December 2003 (03.12.2003) US

(71) Applicant (for all designated States except US): PFIZER  
PRODUCTS INC. [US/US]; Eastern Point Road, Groton,  
CT 06340 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): AGIN, Tonia, Sue  
[US/US]; Pfizer Global Research and Development, 301  
Henrietta Street, Kalamazoo, MI 49001 (US). ROSEY, Ev-  
erett, Lee [US/US]; Pfizer Global Research and Develop-  
ment, 301 Henrietta Street, Kalamazoo, MI 49001 (US).  
WEBER, Frederick, Henry [US/US]; Pfizer Global Re-  
search and Development, 301 Henrietta Street, Kalamazoo,  
MI 49001 (US).

(81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,  
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,  
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,  
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,  
ZW.

(84) Designated States (unless otherwise indicated, for every  
kind of regional protection available): ARIPO (BW, GH,  
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,  
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,  
FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE,  
SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,  
GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.

(54) Title: IN OVO VACCINATION OF CAMPYLOBACTER IN AVIAN SPECIES

(57) Abstract: The present invention provides a method of inducing an immune response against *Campylobacter* in an avian species, especially a domesticated avian species such as chicken, turkey, duck, goose and quail, by administering, *in ovo*, live cells of *Campylobacter*.

WO 2005/053737 A1